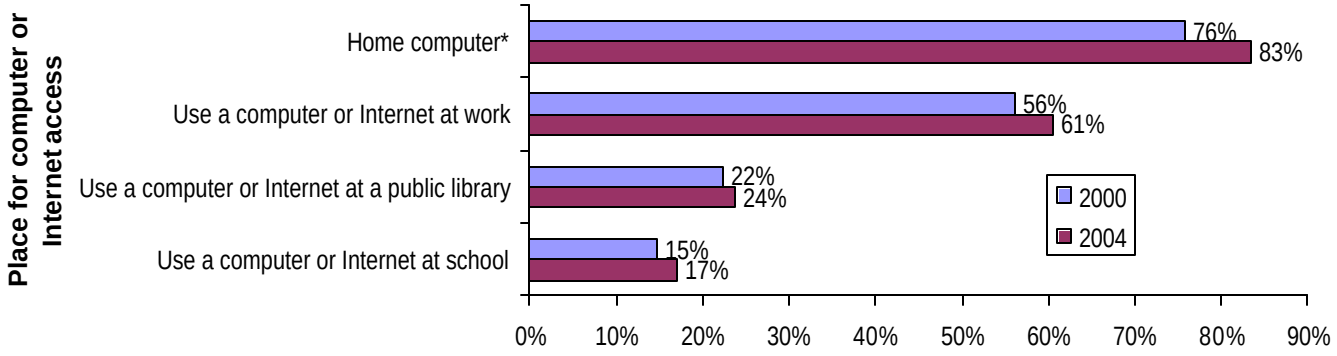
PART 5

Hours using a computer per week

Respondents were asked a series of questions about their computer access. Figure 50, repeated here for convenience, shows that Seattleites have computer or Internet access at a variety of locations.

50. More Seattlites have home computers in 2004 than in 2000, but gains at other access points are not significant

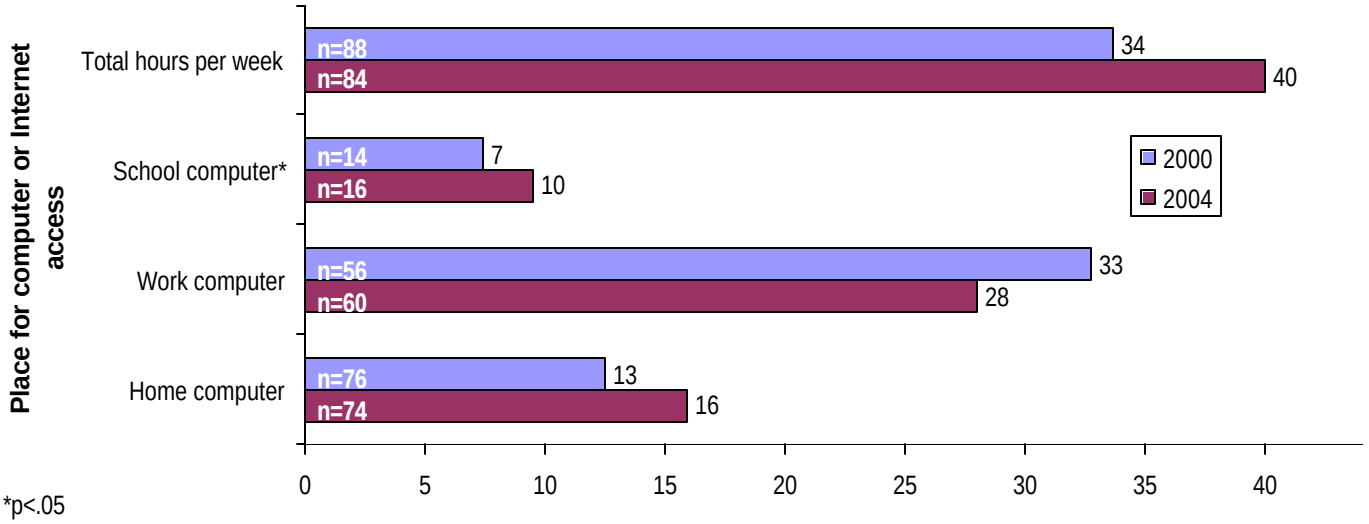


*p<.05

Source: 2004 Seattle IT Residential Survey

Respondents were also asked to estimate the average number of hours per day (converted into hours per week for analysis) they use computers at each location. Similar questions were asked in 2000 and analysis was conducted to examine changes in the amount of time Seattleites are spending on computers at these locations.

72. Seattlites spend more hours per week on computers in 2004 than in 2000, specifically at work



*p<.05

Source: 2004 Seattle IT Residential Survey

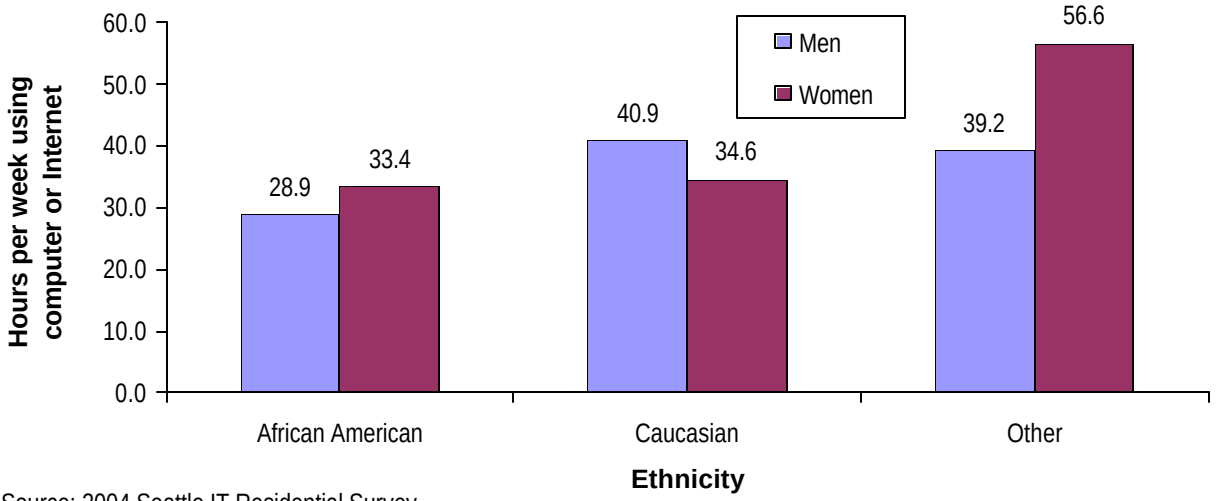
Figure 72[1] illustrates average hours per week using a computer at each location in 2000 and 2004. When comparison are made between number of hours in 2000 vs. 2004 without taking other factors into account (income, education, age, ethnicity and gender), respondents in 2004 report spending more hours using computers overall and at home, and fewer hours using computers at work. Taking the other factors into account eliminates the effect of year except for hours at school. Respondents who use computers in 2004 reported significantly more hours on a school computer than respondents in 2000.

Additional analysis focusing on 2004 reveals that hours per week on a work computer decreases with age from an average of about 29 hours for those 50 and younger, 25 hours per week for those between 51 and 64, to a low of about 16 hours for those 65 and older. Recall that these averages are based on those who use computers at work. Not only do fewer seniors use computers at work, those that do, use them for fewer hours per week than their younger colleagues. Total hour per week using a computer is also lower for older respondents, ranging from 46 hours per week for those 35 and younger down to 16 hours per week for those 65 and older.

Hour per week using a computer at work also increases with income, from an average of 22 hours per week for those with less than middle income to an average of 32 for those with a middle income or more.

Figure 73 illustrates a complicated finding about total hours using a computer per week. This analysis takes into account all the computer users, regardless of where they use them.

73. Hours per week on computers or the Internet depend on the respondent's gender and ethnicity



Source: 2004 Seattle IT Residential Survey

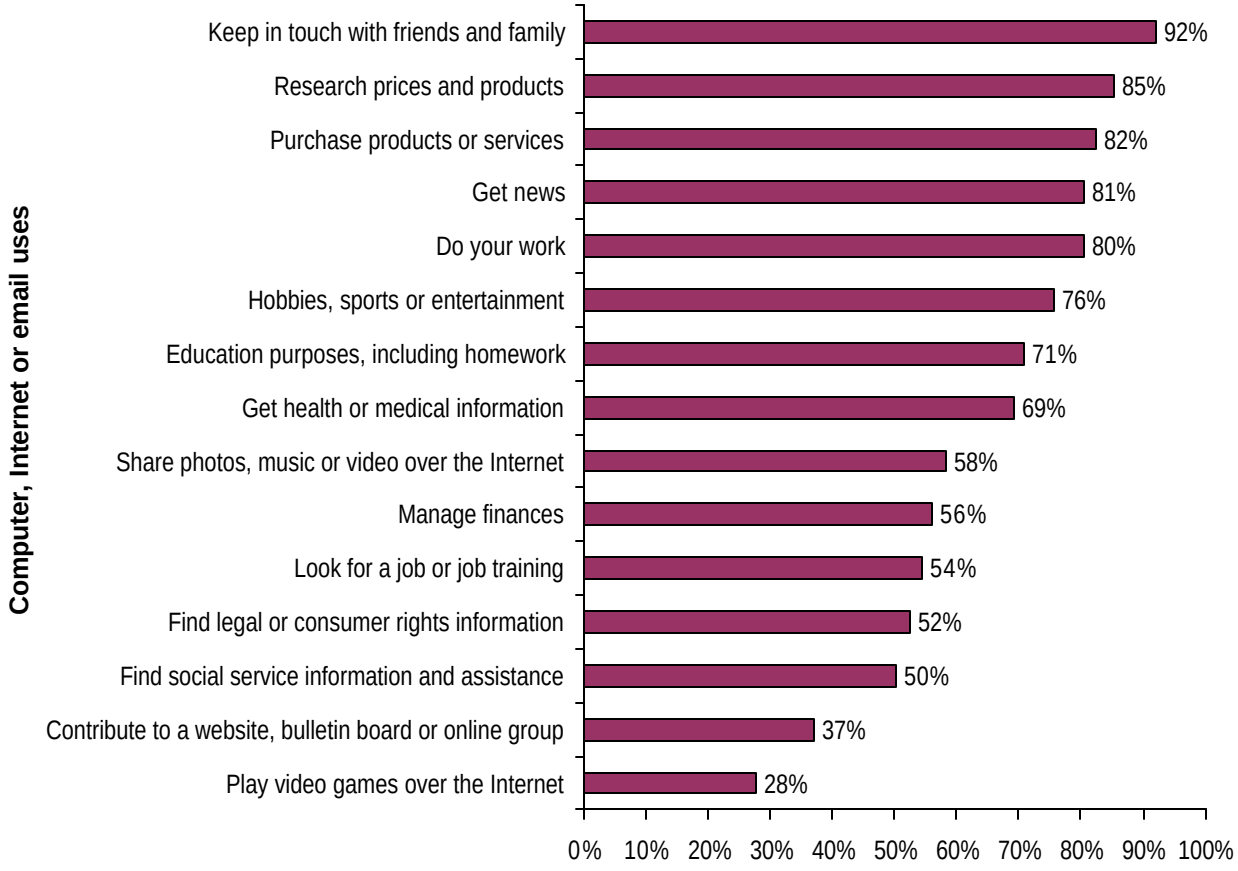
[1] Note that the average total number of hours is not the sum of the averages at each location. This is because the average number of hours at each location is reported only for those with access at that location. For example, if the 246 individuals who indicated that they do not use a computer at work had been included in the average hours on a computer at work, that average would have been considerably lower (an average of about 20 hours).

Figure 73 shows that differences in the amount of time spent on computers by men vs. women is different for different ethnicities. Among Caucasians, men report somewhat more hours of computer use than do women. Among other ethnicities, the opposite pattern holds. This figure also shows that African American computer-users use computers for fewer hours than non-Caucasian computer-users of other ethnicities, with Caucasian computer-users falling between.

How computer are used

Computer users were read a list of activities for which they might use a computer or the Internet and were asked to say which they use. After completing the list, they were then asked to identify the one or two uses that are the most important to them. Figure 74 illustrates the percentage of computer users saying they use computers for each activity. Note that the percentages in this figure are based on the 850 computer users.

74. How computer-using Seattlites use their access



Source: 2004 Seattle IT Residential Survey

Overall, computer users endorsed an average of 9.7 uses – more for people with more income or education and fewer for older people. Computer users almost universally use computers to keep in touch with friends and family. Many Seattleites also use computers to research prices and products and to shop. More than one-third of the computer users report contributing to a website,

bulletin board or online group. More than one-fourth say they play video games over the Internet.

Several demographic differences emerged in how computers are used. Interestingly, none were evident in "Contribute to a website, bulletin board or online group," or "Find social service information and assistance." Eight of these activities showed a pattern of increasing usage with increasing income:

- Keep in touch with friends and family
- Hobbies, sports or entertainment
- Get news
- Do your work
- Research prices and products
- Purchase products or services
- Share photos, music or video over the Internet
- Manage finances.

Younger computer users were more likely to report using the computers for ten of these activities, with the prevalence of use decreasing with age. These activities were:

- Keep in touch with friends and family
- Hobbies, sports or entertainment
- Look for a job or job training
- Education purposes, including homework
- Do your work
- Research prices and products
- Purchase products or services
- Share photos, music or video over the Internet

The pattern for two of the 10 activities was slightly different. For these, "Get health or medical information" and "Get news", about half of those aged 65 years and older endorsed those uses, compared with 70% or more of the respondents in the other age groups.

After taking into account the other demographic factors, education influenced three of the activities: people with more education are more likely to say they use computers to look for health or medical information and to do their work, and they are less likely to say they use computers to find a job or job training.

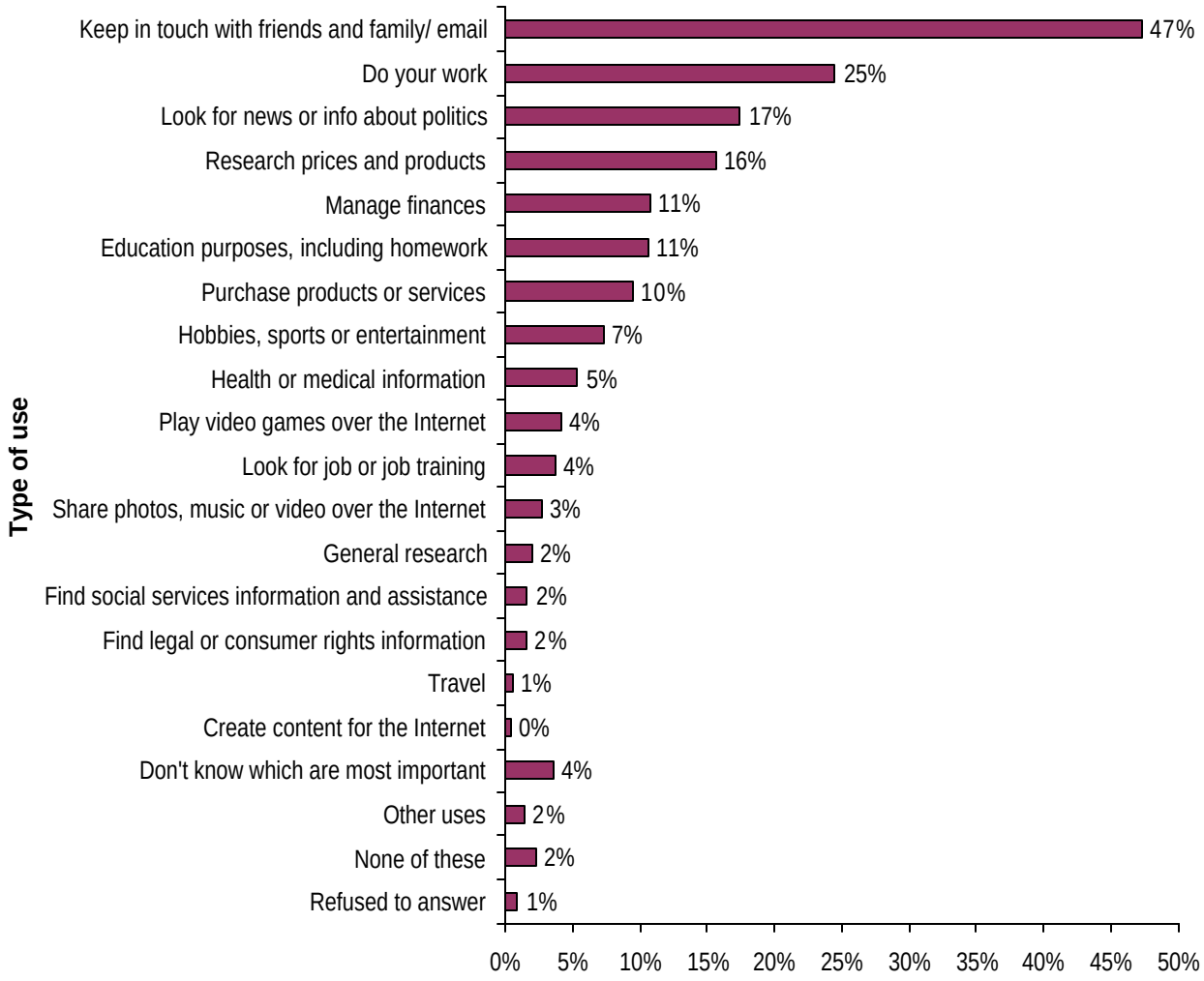
African American computer users were less likely to purchase products or services online (69% vs. more than 80% of the other groups) and more likely than Caucasian computer users to play video games online (46% vs. 22%). Men are also more likely than women to play video games on line (34% vs. 21%).

Current email use was computed based on responses to several items: using the computer or Internet to keep in touch with family or friends, preferring to access government services on the web or via email, or indicating comfort creating and sending an email message or sending/opening an email attachment. Based on these items, *86% of Seattleites – and 97% of*

Seattle's computer users – are current email users. As with access to computers and the Internet in general, access to email increases with income (from 82% to 96%) and education (from 76% to 95%) and decreases with age (from 97% to 63%).

Figure 75 shows which uses Seattle's computer users considered most important.

75. The most important uses of computers, the Internet or email

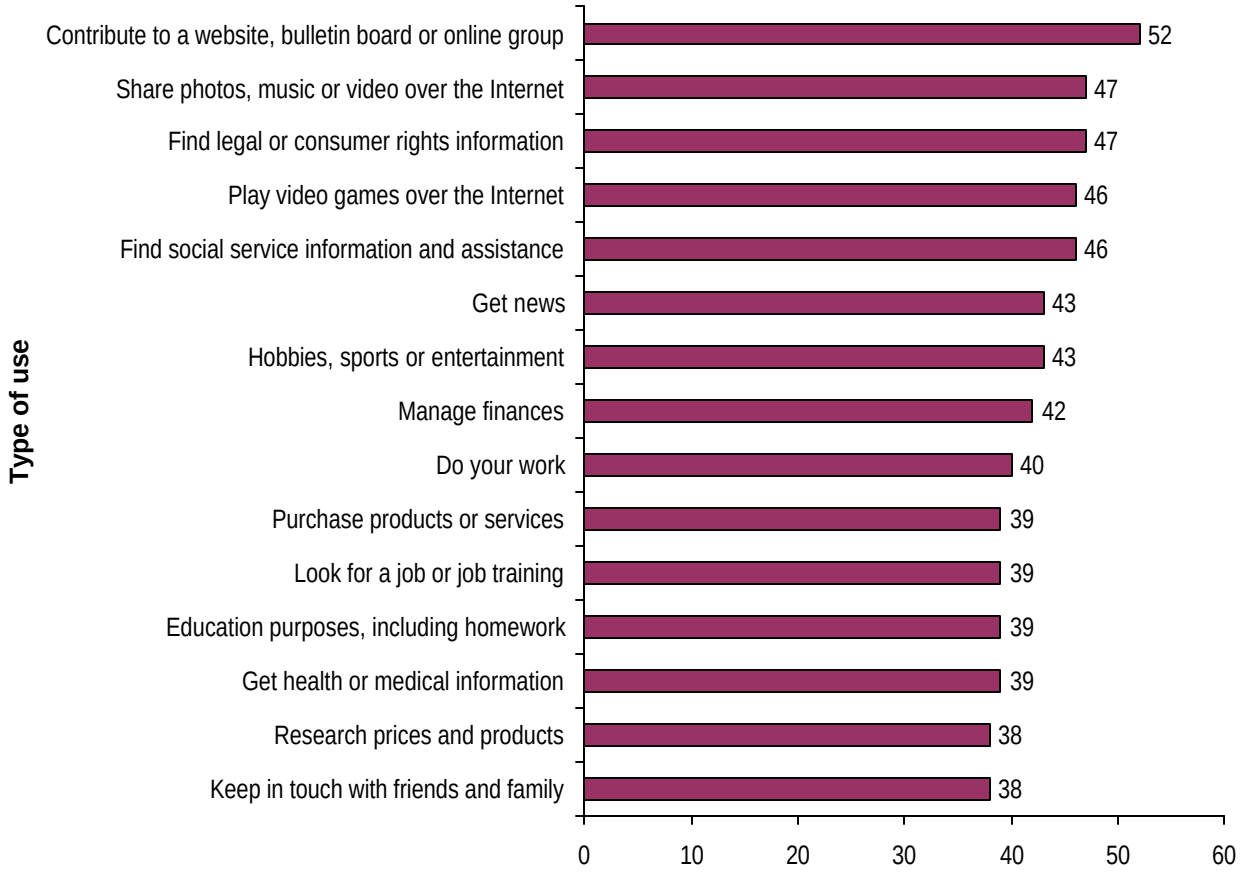


Source: 2004 Seattle IT Residential Survey

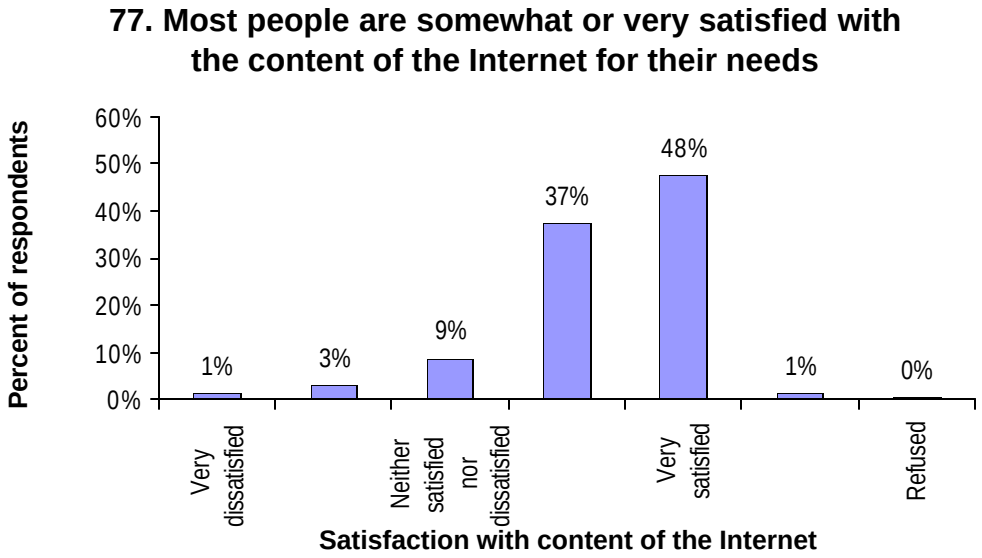
Nearly half the computer users identify keeping in touch with friends and family as one of the most important uses of the computer. This endorsement increased from a low of 38% of those with no more than a high school education, to 40% of those with some college or technical school up to 52% of those with a four-year degree or more. The identification of hobbies, sports or entertainment decreased from about 10% among those with less than a four-year degree to 5% of those with one.

Figure 76 explores the amount of time spent on computers by the ways that people use them. This figure indicates that people who do certain activities on the computer tend to be higher users of computers overall. This may be associated with the requirements of that particular type of activity (e.g., time required to write online list answers, post photos, or read complicated legal information). Or it could indicate that people who contribute to a website also spend a lot of time using the computer for other activities, such as doing their job. In that case, that individual's total hours would be represented in both bars. Therefore, only the most dramatic differences are likely to be apparent in this figure. Specifically, people who contribute to websites, bulletin board or an online group, regardless of what other ways they may use computers, tend to use a computer for more hours per week than people who don't contribute to a website, bulletin board or online group. Computer users who share photos, music or video over the Internet, people who seek legal, consumer rights, or social service information, and online gamers, regardless of the other ways they may use computers, are also heavy users.

76. People who contribute to a website, bulletin board or online group spend the most hours per week using computers



Source: 2004 Seattle IT Residential Survey



Source: 2004 Seattle IT Residential Survey

After being asked about how they use computers, these respondents were asked about their general satisfaction with the content of the Internet for their needs. Figure 77 summarizes their responses.

About half of the computer users say they are very satisfied with the content of the Internet for their needs and another 37% percent said they are somewhat satisfied. These responses were consistent across the demographic categories of computer users, providing no support for the notion that the relative lack of Internet use by some subgroups can be explained by lack of content appropriate to these groups.

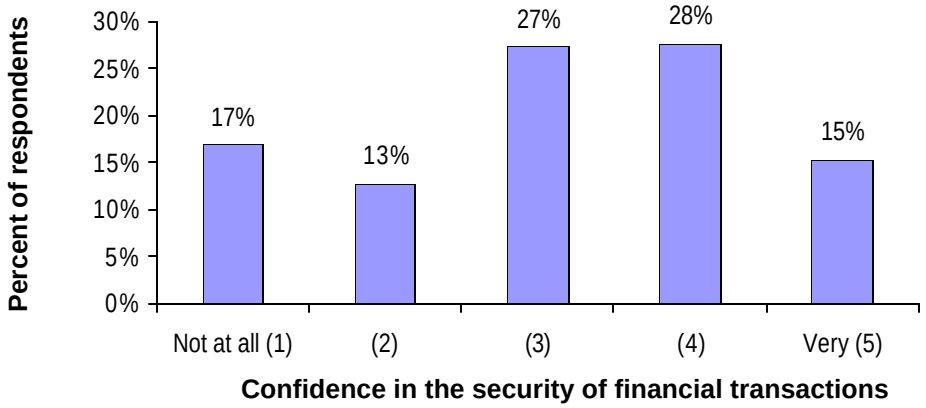
Human relationship to technology

All respondents were asked a series of questions about issues that might affect their confidence in using computers or the Internet. These questions focused on issues such as their perception of the security of financial transactions, the use of personal information and the risk of SPAM (unsolicited advertisements) or viruses sent over the Internet.

Overall, about half (54%) of Seattleites agree that companies and organizations that they can visit on the Internet use personal information appropriately, similar to the response in 2000 (51% agree). Significantly fewer of the seniors agree with this statement in both years (37%). Also, women are more likely to agree with this statement than men (56% vs. 50%), especially those with no more than a high school education (55% vs. 40%).

Not as many of Seattle's residents (44%) think that there are adequate precautions for children to access the web safely, about the same as in 2000 (41%). This response was fairly consistent across demographic subgroups.

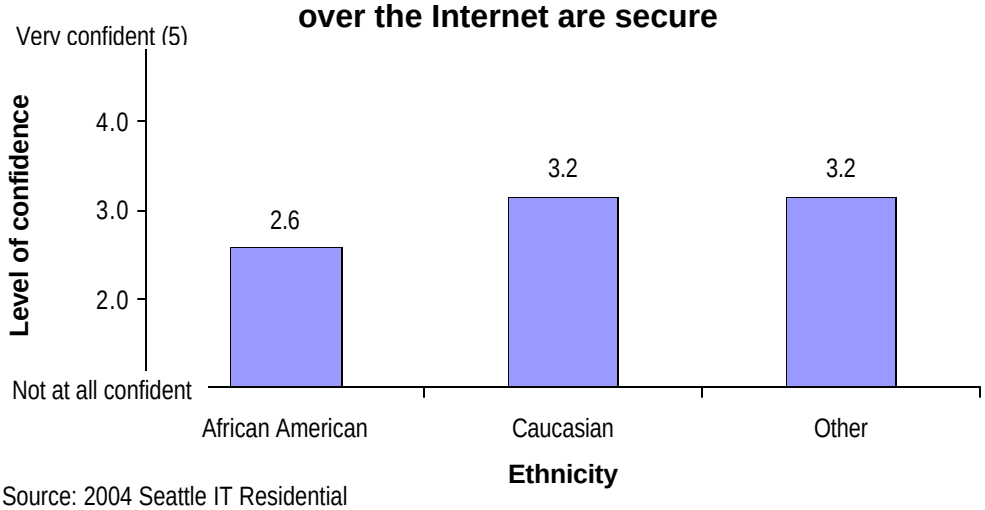
78. Respondents are moderately confident that financial transactions on the Internet are secure and private



Source: 2004 Seattle IT Residential (Base: All respondents)

Figure 78 shows that only 15% of Seattleites are "very confident" that financial transactions on the Internet are secure and private. About a quarter (28%) are just shy of "very confident". Figures 79 to 82 shows that confidence in the security of financial transactions over the Internet is different for different demographic subgroups. Figure 79 shows that African American respondents are less confident than respondents in the other ethnic groups.

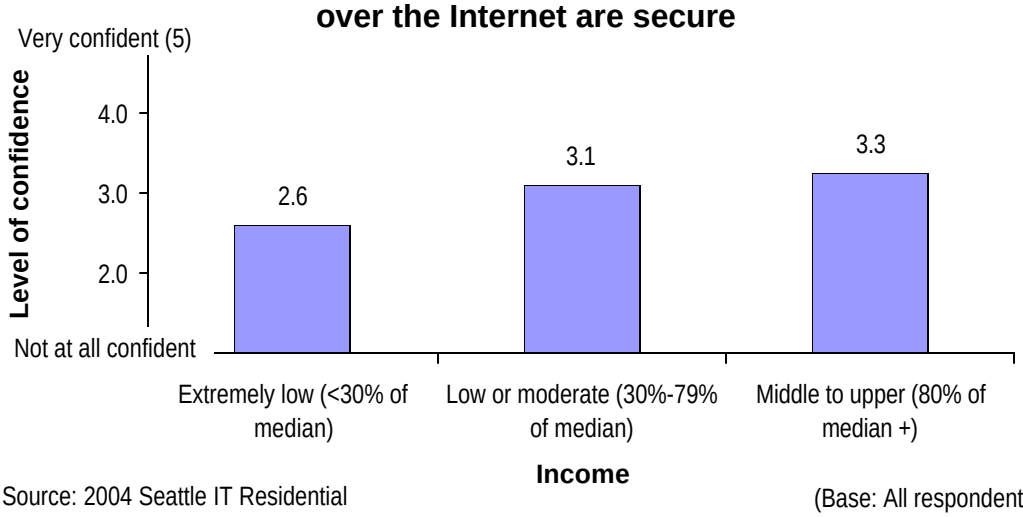
79. African American respondents are significantly less confident that financial transactions over the Internet are secure



Source: 2004 Seattle IT Residential

Figure 80 shows that those with less income are also less confident, and Figure 81 shows similar results for education.

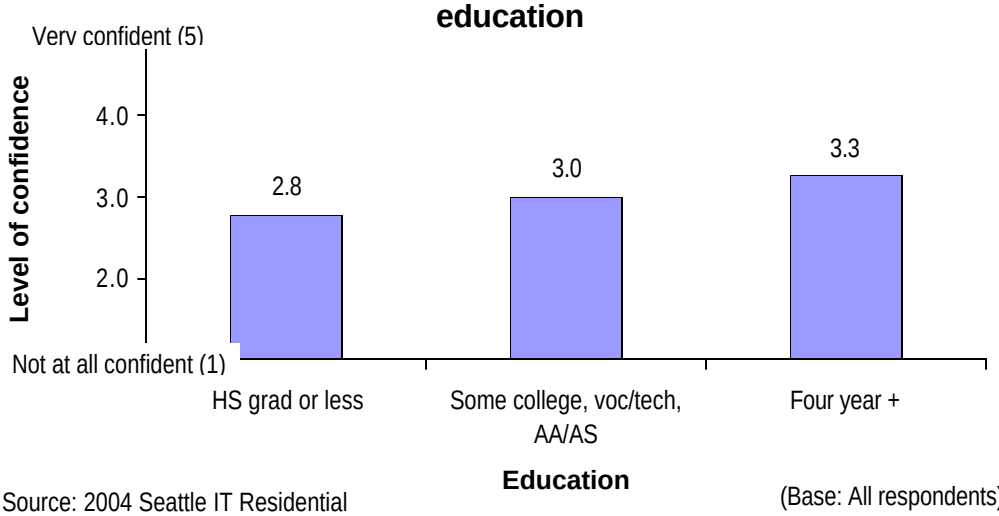
80. The lowest income respondents are significantly less confident that financial transactions over the Internet are secure



Source: 2004 Seattle IT Residential

(Base: All respondents)

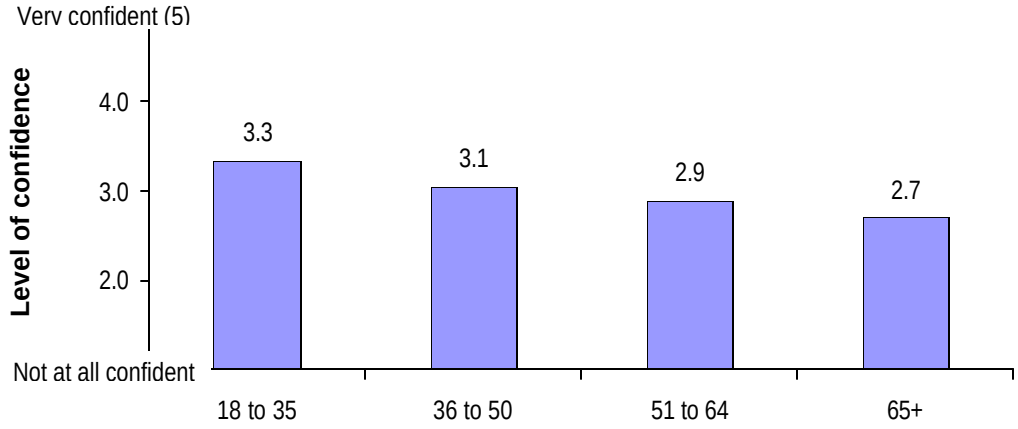
81. Confidence in the security of financial transactions over the Internet increases with education



Source: 2004 Seattle IT Residential

(Base: All respondents)

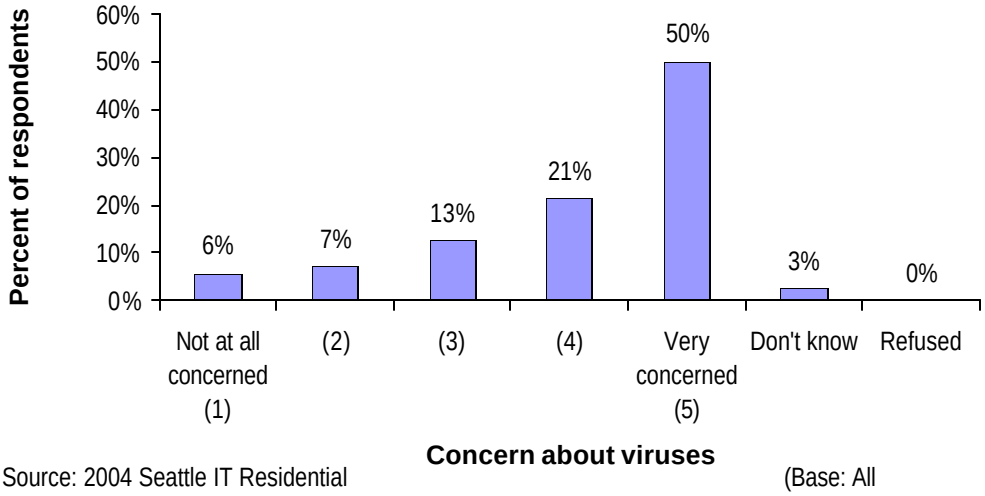
82. Confidence in the security of financial transactions over the Internet decreases with age



Source: 2004 Seattle IT Residential (Base: All respondents)

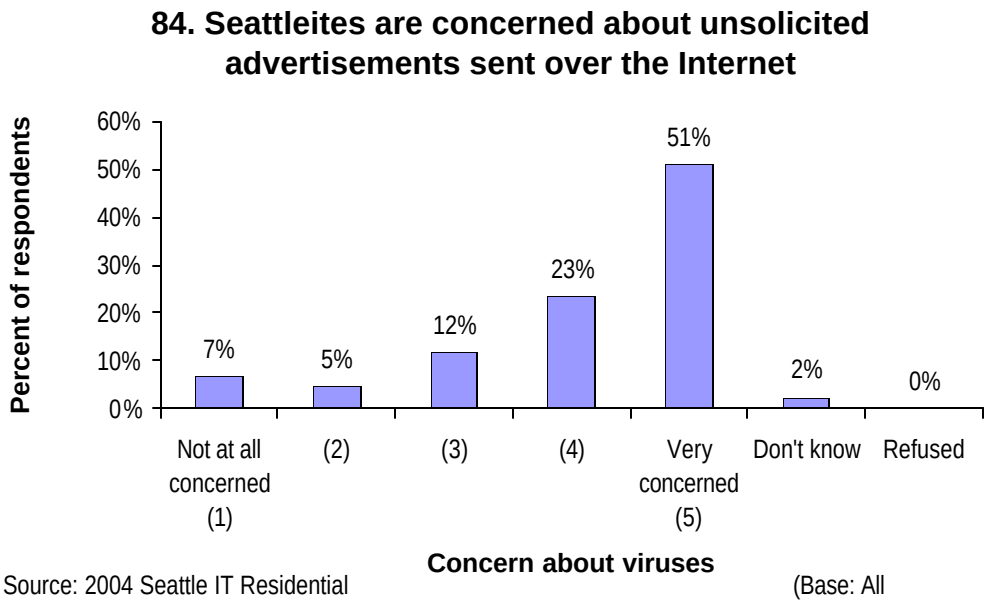
Figure 82 shows that confidence in the security of financial transactions over the Internet decreases steadily with age.

83. Seattleites are concerned about viruses sent over the Internet and damaging computer files



Source: 2004 Seattle IT Residential (Base: All

Figure 83 shows that Seattleites are very concerned about viruses sent over the Internet. Half of the respondents endorsed the highest level of concern. Residents between 36 and 64 are more concerned, with 59% of these respondents saying they are "very concerned" compared with only 43% of those younger than 36 and 48% of those older than 64. The relatively low level of concern expressed by the seniors may be due to their relative lack of use of computer and the Internet. The lower level of concern among the younger respondents is puzzling. One speculation is that many younger computer users may be more comfortable with virus protection and my not know of a time when computer viruses were not prevalent and so it is accepted as a risk of computer use, whereas the responses of older users may reflect the process of adjustment to a world with this type of risk.



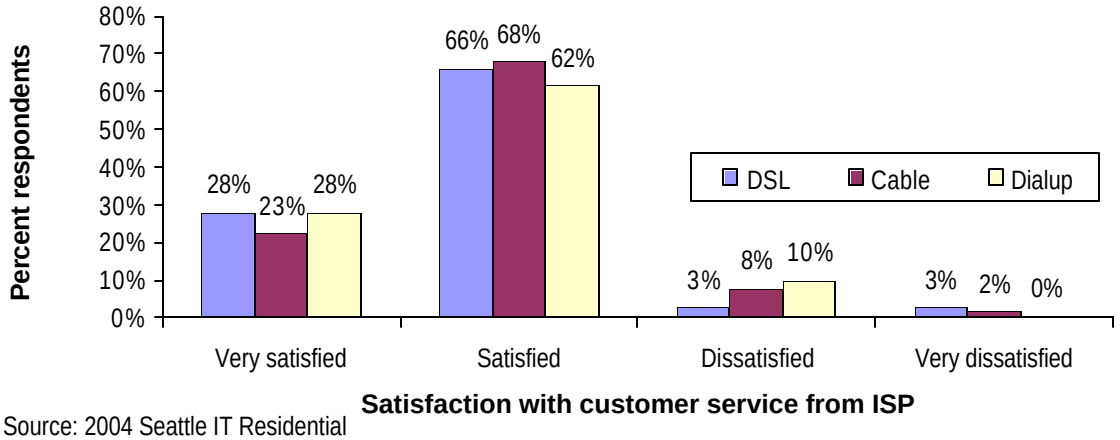
Source: 2004 Seattle IT Residential (Base: All

Figure 84 shows a high level of concern with SPAM, again with half of the respondents saying they are "very concerned" about it. The same pattern with age emerged: respondents between 36 and 64 are more concerned with 60% saying they are "very concerned," compared with 45% of those 35 and younger and 48% of those 65 and older. The same speculation can be made about this type of intrusion. It may be considered the norm among younger users but not among users who began to use computers before SPAM became prevalent. SPAM is more of a concern among those with more income: 55% of those with a middle income or more said they are very concerned about this compared with 45% of those with less income.

ISP service and cost

Respondents with home Internet access were asked about their satisfaction with the customer service from their Internet service provider, as well as the cost of the service. Respondents subscribing to Internet access through Millennium and Comcast gave similar satisfaction ratings and are reported together in the following figures. Figure 85 shows that overall, respondents are satisfied with the customer service they receive from their Internet provider, and the level of satisfaction is the same, regardless of the type of access.

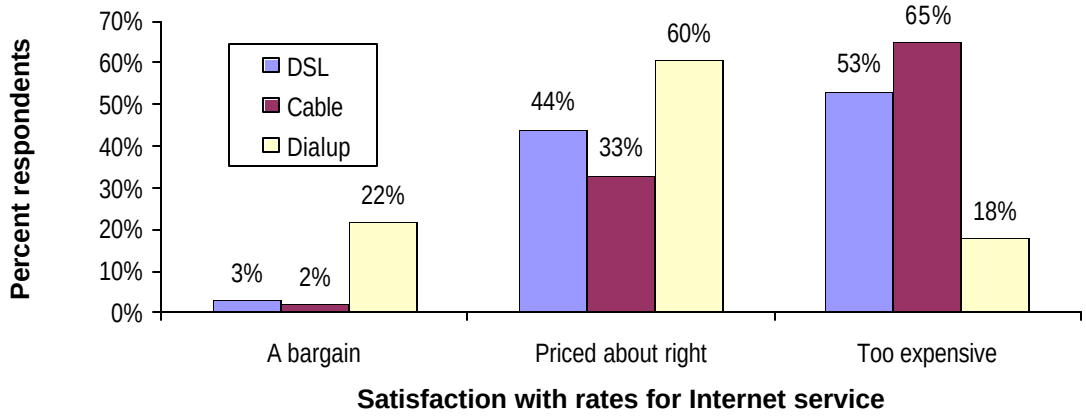
85. Satisfaction with customer service from Internet provider high regardless of type of access



Source: 2004 Seattle IT Residential

Figure 86 shows that respondents with different types of Internet access are not equally satisfied with its cost. Respondents with cable Internet access are significantly more likely to say their service is too expensive, while those with dial up access are more likely to say their service is process about right, or even a bargain.

86. Residents with high speed Internet access, especially cable access, find their Internet access rates too expensive



Source: 2004 Seattle IT Residential Survey